

MELAMPUS PRISCUS, Meek.—Shell oval, moderately thick; spire depressed conical; whorls about five, convex or subangular, last one comparatively large, shouldered above, and tapering below the middle; suture well defined; surface marked by rather obscure lines of growth, and small regular, vertical or slightly oblique folds, which are distinct on the spire and the upper part of the body, but obsolete below; aperture narrow, angular above, and narrowly rounded below; outer lip apparently sharp and without teeth or crenulations within; columella provided with one rather strong oblique fold below, and a much smaller less oblique one about half way up the aperture. Length near 0.77 inch; breadth 0.50 inch; apical angle nearly regular, divergence about 80°.

Locality and position. Estuary beds on Bear River near mouth of Sulphur Creek, lat. 41° 12' north, long. 110° 52' west.

Notes on Coleoptera found at Fort Simpson, Mackenzie River, with remarks on Northern Species.

BY JOHN L. LE CONTE, M. D.

A small collection made at Fort Simpson, by Mr. Robert Kennicott, although containing but few species, has seemed to me a convenient nucleus, about which I could place certain notes derived from the study of other collections received from Russian America, through Prof. F. W. Maklin, and some interesting specimens from Fort Jasper in the northern part of the Rocky Mountains, kindly sent me by my learned friend, A. Murray, Esq., of Edinburgh.

Species from Fort Simpson.

Carabus Chamissonis Fischer.

Opisthius Richardsonii Kirby.

Platynus marginellus, capite thoraceque nigro-piceis, hoc quadrato, postice paulo angustato, et lateribus paulo sinuato, margine testaceo reflexo, basi utrinque late impresso et subrugoso, angulis posticis obtusis rotundatis, elytris thorace duplo latioribus, piceis, subnrescentibus, basi emarginatis, striis haud punctatis, interstitio 3io punctis 5 vel 6 impressis, antennis piceis, pedibus dilutioribus. Long. .25—.28.

Several specimens sent. The elytra are sometimes pale, sometimes dark piceous; the intervals between the striae are rarely flat, usually moderately convex; the impressed punctures are tolerably large; the under surface is piceous, the base of the antennae and feet paler. This species resembles *P. anchomenoides* more nearly than any other species in my collection, but the thorax is more narrowed behind, with the margin narrowly reflexed, and the sides somewhat sinuate towards the posterior angles. The posterior transverse impression of the thorax is well marked, and the dorsal line distinct.

Pterostichus mandibularis; specimens in no wise differing from others found by me at Lake Superior, were sent me by Mr. Kennicott. The species is very closely allied to *Cryobius fastidiosus* Mann. from Russian America, but differs by the thorax being broader, with the sides more suddenly and more distinctly sinuate at the posterior angles.

Pterostichus Luczotii Lec. (*Feronia* Lucz. Dej.; *F. oblongonotata* Say). One specimen not differing from those found at Lake Superior.

Pterostichus 6-punctatus Mann. Two specimens quite similar to those from Russian America.

1860.]

Amara (Leirus) lacustris? Specimens almost precisely similar to the specimen from Lake Superior, were found at Fort Simpson and also on the Saskatchewan. The thorax is, however, somewhat less narrowed behind, and the apex is sparsely punctured.

Amara (Leirus) obtusa Lec., Proc. Acad. Nat. Sci. 7, 348. *Amara Eschscholtzii* Mann. Bull. Mosc. 1852, 297. The specimens sent by Mr. Kennicott are larger than the one sent me by Mr. Motschulsky from Russian America, but do not otherwise differ. It is perhaps *Curtonotus latior Kirby*, Fauna Bor. Am. 36, but the descriptions of the species of this genus by Kirby are so indefinite that reference must be had to the original specimens to determine the synonymy.

Amara (Celia) interstitialis Dej.

Bembidium nitens Lec.; *Peryphus picipes* † Mann. Precisely similar to the specimens from Lake Superior, and Kadjak.

Bembidium nigripes; *Notaphus nigripes* Kirby, Fauna Bor. Am. 57. This species is similar in size and form to *B. variegatum* and *B. patrule*, but differs by the feet and antennæ being black, with the first joint of the latter testaceous beneath. The striæ of the elytra are also less deep, and more finely punctured. The size is smaller than required by the description of Kirby, but the color of the feet is so characteristic, that I can scarcely avoid considering it as his species. *Notaphus quadraticollis Mann.* Bull. Mosc. 1853, 148, is probably the same. The Russian American one described as *B. nigripes* by Mannerheim, is totally different, being much larger, with the pale bands of the elytra very badly defined, and the epipleuræ pale, resembling these characters *B. indistinctum Dej.*, from California; it differs, however, from that species by the thorax being more strongly margined, with the posterior angles more rectangular and prominent, and the basal carinæ very distinct; the dorsal line and impressions are likewise deeper. In all these respects it agrees with *B. approximatum Lec.*, but differs by the punctures of the elytral striæ being larger and less closely placed. The femora are dark: in *B. approximatum* the legs are usually pale, though sometimes dark, in *B. indistinctum* they are always pale. The species will hereafter be known as *B. incrementum*; it differs from all the allied species by the 7th elytral stria being obliterated and represented only by punctures.

Bembidium nitidum Lec.; *Eudromus nitidus* Kirby; a specimen precisely similar to one found by me in the Platte River valley. *Bembidium breve Mann.*, Bull. Mosc. 1852, 301, is closely allied to this species, and on comparison may be found to be identical.

Silphalaponica Linn.

Catops brunnipennis Mann. Bull. Mosc. 1853, 176.

Tachyporus jocosus Say.

Dicerca tenebrosa Lec., *Buprestis (Stenuris) tenebrosa* Kirby.

Ancylochira maculiventris Lec., *Buprestis mac.* Say.

Upiceramboides Fabr.; *Upis reticulata* Say.

Rhagium lineatum Oliv. One specimen precisely similar to those from Oregon and the Atlantic States. I am therefore strongly inclined to doubt the specific value of the Russian American, *R. investigator Mann.* (Bull. Mosc. 1852, 367); the characters given by him as distinguishing it are partly individual and partly sexual.

Chrysomela Adonidis Pallas; *Phædon Adonidis* Kirby, Fauna Bor. Am. 214.

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Haltica bimarigata Say. The difference between this and *Graptodera plicipennis* Mann. is not obvious on comparison. The species is abundant in Kansas, California, Oregon, and at Fort Simpson.

Haltica inærata, oblongo-ovata, convexa, ænea, nitida, thorace latitudine duplo brevior, antrosum subangustato, lateribus parum rotundatis, convexo, parce punctulato, linea transversa postica profunda, elytris parce subtiliter punctatis, thorace paulo latioribus pone basin oblique impressis. Long 18.

One specimen. Resembles a nondescript but common species of the Atlantic States, known in many collections as *H. splendida*, but differs by the thorax being more transverse and somewhat narrowed in front.

Hippodamia 12-punctata Dej.

Hippodamia 5-signata Muls.

Coccinella transversoguttata Fald.

Notes on Russian American Species.

Calathus lenis. *Anchomenus lenis* Mann. I referred this species formerly to *Pristodactyla*, but think that there is not sufficient reason for retaining the latter genus. The present species is closely allied to *C. advena* Schaum, Ins. Deutschl. 1, 389, (*Pristodactyla advena* Lec.) from Lake Superior, and Maine, but in the latter the sides of the thorax are slightly sinuate behind, whereby the posterior angles become less rounded; among the specimens found by me at Lake Superior is, however, one which does not differ in this respect, and which appears entirely similar to the specimens from Kadjak.

Schaum's statement from Chaudoir (l. c.) that *Pristodactyla* differs from *Calathus* by the absence of furrows on the outer surface of the four posterior tarsi is not correct. Of the specimens of *P. impunctata* in my collection one has the groove very strongly marked; three have it distinct, though not deep, while in the two others it is wanting; of the two specimens referred by me to *P. corvina* Lec., the groove is obsolete in one, and wanting in the other. From these facts I draw two inferences:

1. The genus *Pristodactyla* is to be suppressed.
2. Many of the species of *Calathus* as at present recognized, are too indistinct for systematic purposes, and are to be considered as races clustering around a few principal forms. The species of North America may be arranged as follows:

A. Thorax postice haud angustatus, foveis basalibus obsoletis.

1. Corpus elongatum, thorace latitudine haud brevior, lateribus modice reflexis. *C. gregarius* Dej.

2. Corpus elongatum, thorace latitudine haud brevior, lateribus anguste marginatis. *C. ingratus* Dej.; *C. incommodus* Mann, (Russ. Am.) and *C. confusus* Lec. (Lake Superior), are almost imperceptible races of this species.

3. Corpus elongatum, elytris subopacis, thorace latitudine haud brevior, lateribus modice explanatis. *C. opaculus* Lec.

4. Corpus elongatum, elytris subopacis thorace latitudine haud brevior, antrosum vix angustato, lateribus parum rotundatis vix explanatis. *C. quadricollis* Lec.

5. Corpus minus elongatum, elytris subopacis, thorace latitudine brevior, lateribus valde rotundatis explanatis. *C. Behrensii* Mann.

6. Corpus minus elongatum, elytris subopacis, thorace latitudine brevior, antrosum sensim angustato, lateribus parum rotundatis, explanatis. *C. obscurus* Lec.

7. Corpus minus elongatum, elytris subopacis, thorace latitudine brevior, lateribus valde rotundatis vix explanatis. *L. ruficollis* Dej.

B. Thorax postice angustatus, foveis basalibus latis; (unguiculi subtilius serrati.)

8. Thorace margine latiusculo reflexo: α . lateribus postice subsinuatis, C. *advena* Schaum; β . lateribus obliquis haud sinuatis, C. *lenis* Mann.

9. Thorace tenuiter marginato, angulis posticis rotundatis, postice haud transversim impresso. C. *mollis* Schaum.

10. Thorace tenuiter marginato, postice magis angustato, angulis posticis rotundatis, postice transversim impresso; (major unguiculis vix obsolete serratis). C. *dubia* Lec.

Anchomenus dulcis Mann., belongs to this division, and is most probably a race of C. *mollis*, though this is merely a conjecture on my part, as I have never seen a specimen of it.

C. Thorax fere rotundatus, vel ovalis, foveis basalibus latis; (unguiculi fortiter serrati).

11. α . Thorace latitudine subbreviore, postice perparum angustato, C. *impunctata* Lec. (*Feronia imp.* Say; *Pristodactyla americana* Dej.) β . Thorace longiore postice vix angustato, margine paulo angustiore. P. *corvina* Lec.

Trechus spectabilis Mann. and *T. oblongulus* Mann., are by no means *Trechus*, but belong to *Bembidium*, forming a group between VIII. and IX. (Proc. Acad. 1857, 4), characterized by the thorax subcordate, with the basal foveæ somewhat double, the elytral striæ deep, the outer ones scarcely abbreviated, the base of the antennæ and the feet pale; the last joint of the palpi is longer than in the neighboring groups, but acicular and not at all conical.

Euplectus parviceps Mäklin, belongs to *Faronus Aubé*.

Corymbites caricinus Esch. = *C. telum* Lec.

Cryptohypnus fallax Mann. From this species *C. picescens* Lec., found at Lake Superior, seems scarcely to differ; in the latter, however, the punctures are a little stronger, and the size somewhat larger, but hardly sufficient to establish a specific difference. The names were both published in 1853, but that of Mannerheim has priority by a few months,

Rhagonycha binodula Mann. does not differ from *Telephorus fraxini* Lec. (*Cantharis fraxini* Say, *Telephorus nigrita* Lec.), which is very abundant at Lake Superior, and is found also in Pennsylvania.

Notes and descriptions of other Northern Species.

Calosoma laqueatum, robustum, apterum, nigro-æneum, capite thoraceque punctulatis et rugosis, thorace latitudine duplo breviore postice angustiore, angulis posticis productis subacutis, margine anguste reflexo, elytris ovatis punctatis obsolete striatis costis tribus catenatis lævibus parum elevatis. Long. .67.

Saskatchewan. In sculpture resembles *C. moniliatum* Lec. and *C. cellatum* Esch.; the former has the thorax much more strongly punctured and the elytra oblong oval, and much narrower; the latter is winged, and has the posterior angles of the thorax less prolonged and broadly rounded, and the elytra more convex, with the sides less rounded.

Nebria moesta Lec. I have received from Russian America two species under the name *N. Mannerheimii* Fischer. The one, received from Baron Chaudoir and Count Mnizech, has the sides of the thorax moderately rounded, with the posterior angles rectangular and not very prominent; the striæ of the elytra appear smooth, and the outer ones are less impressed at the tip. This

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I take to be the true species. The other, received from Mr. Motschulsky, has the thorax broader, more rounded on the sides, with the posterior angles very prominent, precisely as in *N. metallica*; the striæ of the elytra are scarcely less deep at the tip than at the base; this specimen agrees perfectly with those of *N. moesta*, found by me on the north shore of Lake Superior. I have also a specimen from Oregon, and several were collected by Mr. Barnston at Carlton House, Saskatchewan River.

Platynus corvus, niger, nitidus, thorace latitudine brevior, lateribus cum basi rotundatis, margine laterali anguste reflexo, postice paulo latiore, foveis basalibus latis haud profundis, tuberculo valde obsoleto notatis, elytris oblongis thorace latioribus, planiusculis, basi emarginatis, striis profundis impunctatis, interstitiis paulo convexis, 3io tripunctato. Long. .39.

Black Hills, Dr. Hammond; Saskatchewan. By the form of the thorax this species exactly resembles *P. atratus Lec.*, except that it is a little broader. The elytra are, however, broader, less convex, and more emarginate at the base. The size is one half larger.

Platynus crassicollis, elongatus, nigro-æneus virescens, thorace rotundato, margine anguste reflexo, foveis basalibus punctulatis, postice transversim impresso, elytris thorace haud latioribus, striis profundis impunctatis, interstitiis parum convexis, 3io punctis 4 vel 5 impressis. Long. .32.

Jasper House, Rocky Mountains, Mr. A. Murray. Of the same form as *P. protractus Lec.*, but smaller, with the thorax more convex, punctured behind, and transversely impressed, and with the striæ of the elytra deeper.

Platynus picicornis, æneo-niger, nitidus, thorace ovali, latitudine paulo longiore, margine tenui reflexo postice vix latiore, foveis basalibus latis, angulis posticis valde rotundatis, elytris basi emarginatis, oblongis, striis impunctatis, interstitiis parum convexis, 3io 6-punctato, antennis palpisque piceis, pedibus piceo-testaceis. Long. .24.

Jasper House. Related to *P. retractus Lec.*, but is much smaller, and differs from that and all the others of that division by the characters given above.

Pterostichus validus Mann. Jasper House; precisely similar to specimens from Sitka.

Pterostichus protractus, angustus, thorace latitudine fere longiore postice angustato, margine distincto reflexo, lateribus late rotundatis, postice subsinuatis, basi recte truncato, linea marginali profunda medio interrupta, utrinque bistriato, stria externa brevissima, elytris thorace vix latioribus planiusculis fortiter striatis, humeris denticulatis. Long. .52.

Jasper House. Resembles by its form *P. contractus Lec.*, but belongs to a different group having the base of the thorax margined, with the marginal line interrupted at the middle, as in *P. validus*, *californicus*, *algidus*, &c., than which this species is much more slender, with the thorax more narrowed behind.

Amara faretæ Lec. Saskatchewan.

Harpalus amputatus Say. Saskatchewan, Mr. Barnston.

Harpalus carbonatus, elongato-oblongus, capite obtuso, oculis modice prominulis, thorace capite latiore, latitudine brevior, postice subangustato, lateribus late rotundatis, postice obsolete explanatis, angulis posticis rectis, apice rotundatis, foveis basalibus parvis haud profundis parce punctatis; elytris (feminae) opacis, apice haud sinuatis, striis impunctatis, interstitiis parum convexis, antennis palpisque piceo-rufis. Long. .40.

Saskatchewan. Similar in form to *H. advena Lec.*, but the thorax has the posterior angles less rounded.

1860.]

Bradycellus longiusculus Lec.; *Acupalpus longiusculus* Mann. A specimen quite similar to one from Sitka, but captured at York Factory, was sent me by Mr. Murray.

Bembidium funereum, longiusculum, nigrum, piceo-æneo tinctum, thorace latitudine paulo brevior, planiusculo, postice modice angustato, lateribus antice rotundatis, postice subsinuatis, foveis basalibus bistriatis, angulis posticis rectis, carinatis, elytris ovalibus, paulo convexis, striis subtilibus, 7ma vix oblitterata, 3ia punctis duobus notata, pedibus piceis. Long. .19.

Saskatchewan River; this species belongs to div. VIII. (Lec. Proc. Acad. Nat. Sc. 1857, 4), but differs from all the other species of that group known to me by the thorax more narrowed behind, and the regularly oval elytra, as well as by the piceous legs.

Dicerca prolongata Lec. Trans. Am. Phil. Soc. ii. 194. Saskatchewan River.

Asaphes carbonatus, ater subopacus, fronte concava, capite thoraceque confertim punctatis, hoc latitudine paulo longiore, antrorsum subangustato, lateribus late rotundatis, angulis posticis prolongatis subdivaricatis, carinatis, fissuris basalibus brevibus, basi breviter canaliculato, elytris striis profundis, interstitiis paulo convexis confertim punctatis, antennis articulo 3io 4to vix minore. Long. .68.

Oregon or Rocky Mountains, one male. This species in size, form and color, resembles the Oregon *A. morio* Lec., but the thorax is densely punctured, and the elytra are also more densely punctured.

Agriotes macer Lec. A specimen of this species, precisely similar to the one from Oregon, was received from Jasper House.

Podabrus gradatus, capite thoraceque testaceo-luteis, illo pone antennas punctato, thorace latitudine sesqui brevior lateribus ante medium rotundatis, late depressis, apice late concavo, postice convexo et canaliculato, basi marginato, angulis minutis dentiformibus; elytris dense rugose punctulatis, sordide luteis, postice sensim infuscatis, subtus antennis pedibusque nigris, abdominis margine, femoribus basi, coxis, antennarum articulo 1mo palpisque basi rufotestaceis. Long. .48.

Oregon or Rocky Mountains. The ungues are cleft, with the lower portion but little shorter than the upper. The 2nd and 3rd joints of the antennæ are equal, and together are one-half longer than the 4th; the first joint is reddish yellow, with the tip black. The thighs are yellow at the base, gradually becoming dark at the tip.

TRICRANIA Lec.

Under this generic name I would separate the North American species allied to *Horia*. The genus has been indicated, but not named by Lacordaire, (Gen. Col. 5, 664, note), and differs from *Horia* by the triangular head; by the obconical, scarcely compressed joints of the antennæ; by the mandibles not being toothed; by the last joint of the palpi being somewhat longer than the penultimate, (in *Horia* the last joint is much shorter); and by the posterior tarsi one-half shorter than the tibiæ. The body is also somewhat hairy, while in *Horia* it is glabrous. Three species are known to me, forming two divisions.

A. Body without wings. *T. sanguinipennis*; *Horia sanguinipennis* Say. Middle States.

B. Body winged. *T. Stansburii*; *Horia Stansburii* Hald., Utah: and *T. Murrayi*, niger opacus, alatus, capite thoraceque dense granulato-punctatis, elytris elongato-oblongis, thorace haud latioribus, minus subtiliter

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rugose punctatis, macula utrinque basali rotundata, lateribusque pone quadrantem rufis. Long. '48.

Rocky Mountains or Oregon. Of the size and shape of *T. Stansburii*, but differs by the head and thorax being more finely and densely punctured: the latter is also more transverse, and the sides converge slightly behind, while in the other they are parallel. I take great pleasure in dedicating this fine species to my learned friend, Andrew Murray, to whose liberality I owe this and many other valuable additions to my collection.

Acmæops mollipilosa, robusta nigra, pube longa cinerea hand dense vestita, capite dense thorace modice punctato, hoc convexo, apice constricto, lateribus ante medium subito rotundatis, postice parallelis, obsolete canaliculato, elytris dorso subdepressis, lateribus oblique impressis, apice suboblique attenuatis dein obtuse rotundatis, violaceo-tinctis, minus dense punctatis, punctis postice subtilioribus, pedibus dense fusco-pubescentibus, antennis fuscis basi nigris. Long. '57.

Oregon or Rocky Mountains. Resembles more nearly the Californian *A. lugens* Lec. than any other in my collection, but is sufficiently distinct from that species by the more flattened elytra, with the sides strongly impressed behind the humeri, and more broadly rounded, or even subtruncate at the tips.

Acmæops viola, robusta, nigra, pube brevi nigra parce vestita, capite dense, thorace modice punctato, hoc convexo, apice constricto, lateribus præcipue antice rotundatis, elytris dorso subdepressis, apice obtuse rotundatis, minus dense antice fortius postice subtilius punctatis, cyaneo-violaceis, antennis nigris. Long. '43.

Oregon or Rocky Mountains. Smaller than the preceding, and differs by the shorter black pubescence, the elytra more strongly punctured, less impressed at the sides, and more regularly rounded at the tip.

Acmæops lupina, nigro-picea, pube longa fusca dense vestita, capite dense subtilius, thorace minus subtiliter confertim punctatis, hoc convexo apice constricto, lateribus subangulatis postice paulo concavis, elytris subcylindricis, thorace sesqui latioribus, antice modice postice subtilius et densius punctatis, apice rotundatis subtruncatis. Long. '48.

Rocky Mountains.

Chrysomela multipunctata, Say; var. *verrucosa* Suffrian, Ent. Zeitung, 1858, 266. Carlton House, Mr. Barnston.

Chrysomela subseriata, nigra, vix ænescens, oblonga, alata, thorace lateribus incrassatis rotundatis, sulco vago grosse punctato a disco separatis, hoc subtiliter punctato, elytris thorace haud latioribus, disperse punctatis, punctisque paulo majoribus seriatis, seriebus per paria minus distantibus. Long. '32.

Oregon or Rocky Mountains. The punctures of the rows are small and closely placed, the rows are 9 in number and a short scutellar one.

Oedionychis scripticollis Lec.; *Altica scripticollis* Say. Saskatchewan River.

Synopsis of the Scaphidiidæ of the United States.

BY JOHN L. LE CONTE, M. D.

Several years ago I wrote a synopsis of our species of the family of Coleopterous insects here treated of, but the manuscript having been lost by the printer, was not published. I have recently had occasion to study again this group, and therefore now make known the species in my collection. The native genera may be arranged in the following manner:—

1860.]